

**Building a European marine knowledge infrastructure:
Roadmap for a European Marine Observation and Data Network - EMODNET**

**Joint Marine Board - EuroGOOS response to the stakeholders' consultation
02 June 2009**

Dear Commissioner Borg,

The Marine Board and EuroGOOS welcome the European Commission's commitment to the preparation of a Roadmap and related Action Plan for the establishment of a **European Marine Observation and Data Network (EMODNET)**. The Marine Board-ESF and EuroGOOS would also welcome the opportunity, offered by DG MARE services in the frame of the stakeholders' consultation on EMODNET Roadmap, to provide their opinion as to the state of Europe's marine knowledge infrastructure and what steps are appropriate to be taken at EU and Member State levels.

The Marine Board and EuroGOOS consider it is important to reiterate that the Aberdeen Declaration called for **"a fully operational European Seas and Oceans Observing System"** and not solely a data portal.

In this context, in 2008, the Marine Board and EuroGOOS established a Specialist Panel to prepare a concept/vision document on an operational European Seas and Oceans Observing System. The resulting joint *Marine Board – EuroGOOS Vision Document on EMODNET* (September 2008)¹ called for **"an end-to-end, integrated and inter-operable network of systems of European marine observations and data communications, management and delivery systems, supported by a comprehensive user-oriented toolkit to enable implementation of the Integrated Maritime Policy for Europe"**. This Vision Document was officially presented to you on 24 October 2008 during BioMarine 2008 in Marseille and was also formally welcomed by Mr. Fokion Fotiadis, Director General of DG MARE, as an expression of "the considered opinion of knowledgeable and articulate stakeholders."²

With respect to a number of proposed steps in the Roadmap³, the Marine Board and EuroGOOS make the following comments and observations, and would advocate for:

- **Additional investments for the observing infrastructure**
Marine observations are still limited to a small number of parameters (mainly physical) and have large spatial and temporal gaps especially at shelf and coastal areas. On the one hand the "open sea" or "climate" components of the global ocean observing system have

¹ See: www.esf.org/marineboard/publications

² Letter to Marine Board Executive Scientific Secretary (12 November 2008)

³ References/ quotations in the present joint Marine Board - EuroGOOS response to the stakeholders' consultation on EMODNET Roadmap refer to Commission staff working document SEC (2009) 499 final.

been / are being addressed through large international collaborative research driven efforts (e.g. ARGO and SOOP programmes). On the other hand, the “ecosystem” and “coastal” components rely to a large extent on uncoordinated national initiatives, resulting in a very fragmented picture (with adequate numbers of mainly physical marine observations in certain areas of Europe and very few, if any, in other areas)⁴. While the inadequate monitoring of biochemical variables at both basin scale and in coastal areas is recognized ([section 3.3](#)), the need for additional observations is presented as being of scientific relevance only ([section 5.2.2](#)). The importance of such observations and data, for example for implementing the Marine Framework Strategy Directive, cannot be overemphasised. **Observation gaps should be identified and prioritized and necessary investments should be made accordingly.**

- **Sustainability of the observing system**

To a large extent, the present observing system is based on research funding while only very few components are operationally secured by long-term commitments from the National Agencies. Components of the global observing system such as the ARGO programme, time series stations and satellite observations, which allow observation and forecasting for the marine environment, are currently supported by research funding. The Marine Board and EuroGOOS would, therefore, advocate for an **urgent transition from research to sustained operational mode of the present (and future) observing systems**. The meteorological community or the Common Fisheries Policy arrangements, where Member States and the EU share responsibilities, are successful examples of such transitions. Should its *in-situ* component be appropriately addressed, GMES could provide an opportunity for the observing system transition towards an operational mode.

- **Multi-dimensional mapping of the sea in Member States’ waters.**

The Marine Board and EuroGOOS welcome the European Commission’s commitment, referred to as part of the EMODNET initiative ([section 7.2](#)), to prepare a programme for the development of mutually compatible and multi-dimensional mapping of the Member States’ waters. The Marine Board and EuroGOOS do not consider this as necessarily associated with the EMODNET, but as a strategically important stand-alone activity and would be pleased to draw on their membership’s expertise to advise the European Commission on this.

- **European Atlas of the Seas**

The Marine Board and EuroGOOS welcome the proposal to publish a **European Atlas of the Seas**, using available spatial information and building on the work of the EMODNET and the proposed Eurostat Socio-Economic Database ([section 3.1](#)), in 2009 and would welcome the opportunity to provide input to this initiative.

To conclude, as presented in the *Marine Board – EuroGOOS Vision Document on EMODNET (September 2008)*, there are specific actions to be taken to ensure that **appropriate, sustainable investments are made in EMODNET**. These include:

- An evaluation of the costs and benefits of various observing system scenarios must be undertaken to determine the **benefits to be derived from implementation of EMODNET**. This evaluation should consider the cost of no action.

⁴ See: SEPRISE (Sustained, Efficient Production of Required Information Services) FP6 Specific Support Action aiming to further operational oceanographic services; www.seprise.eu/.

- **The appropriate level of funding, responsibility and cooperation for investment to fill identified data gaps** and the provision of data management must be determined among Member States and at EU level. There are good examples of networks and management activities which are best implemented by Member States, e.g. for the individual regional seas, and others, such as the EuroArgo initiative, which might be better organised at EU level.
- In view of the **improved collection and scientific use of data by Member States under existing EU agreements, directives or regulations**, methods must be established to gain access to the data coming from, for example, the Water Information System for Europe (WISE), the Water Framework Directive (for transitional and coastal waters), the European Marine Strategy (for marine waters), the Data Collection Regulation (for fisheries), the Habitat Directive and Natura 2000 (for biodiversity). The prospective EU Shared European Information System will facilitate this action.
- As far as possible, **the data collected by military and industry** (e.g. oil and gas, fishing, transport) should be included in the EMODNET. In the same way, **data collected through networks operated by local authorities** should be considered for inclusion.
- Data collected via the EMODNET should be used to contribute to the **multidimensional mapping of Member State waters and to the production of a European Atlas of the Seas**, outlined as a priority in the Action Plan of the European Integrated Maritime Policy.
- **Development of new technologies** (e.g. deep sea observatories) **and new sensors** (e.g. oxygen sensors on Argo floats) **should be encouraged by EU and Member States** to help fill identified data gaps using for instance the European Strategy for Marine and Maritime Research.

The Marine Board-ESF and EuroGOOS wish to ensure that their recommendations, which were partially mentioned in the EMODNET Roadmap, are satisfactorily included in the next steps towards the EMODNET. The Marine Board-ESF and EuroGOOS trust a fruitful dialogue will be maintained with the European Commission, and are looking forward to actively contributing to the EMODNET developments in order to support the better monitoring and management of the European oceans and seas, to help authorities meeting regulatory requirements and to stimulate the development of an innovative value-added industry.

Yours sincerely,



Lars Horn
Chair
Marine Board-European Science Foundation



Peter Ehlers
Chair
EuroGOOS

Cc.: Fokion Fotiadis (DG MARE, Director General); Michael Koehler (Head of Cabinet of Commissioner Joe Borg); Tiago Cunha (Member of Cabinet of Commissioner Joe Borg); Paul Nemitz (DG MARE, Head of Unit); Katherine Angell Hanson (DG MARE, Policy Officer); Iain Sheperd (DG MARE, Policy Officer); Manuela Soares (DG RTD, Director); Pierre Mathy (DG RTD, Head of Unit); Alan Edwards (DG RTD, Research Programme Officer); Waddah Saab (DG RTD, Research Programme Officer); Violetta Vinceviciene (DG ENV, Policy Officer).